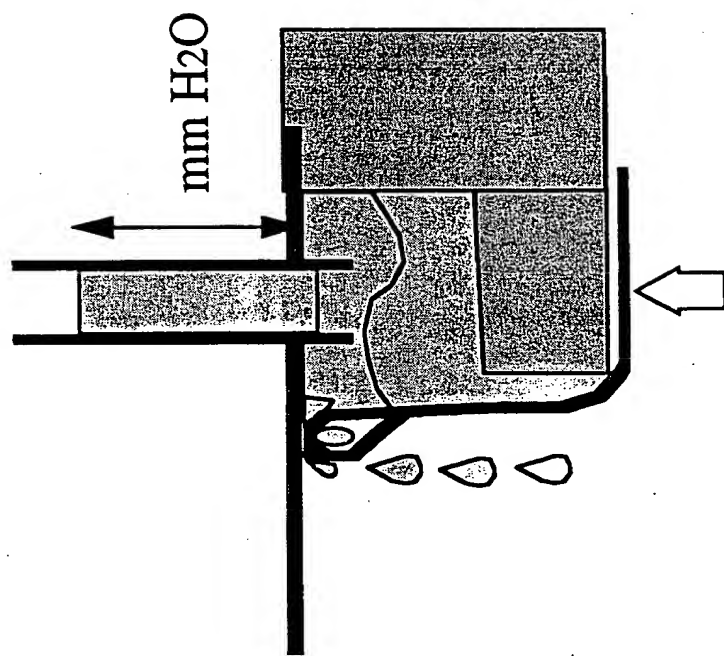
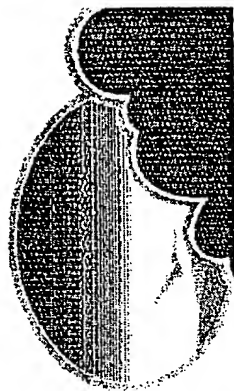
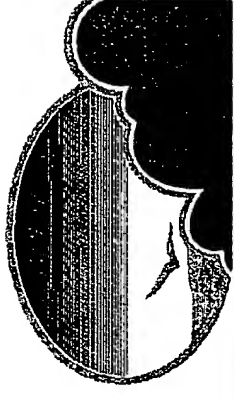


1 Method/Apparatus



Patent, sealing

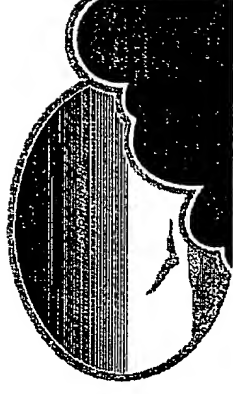


◆ Theory

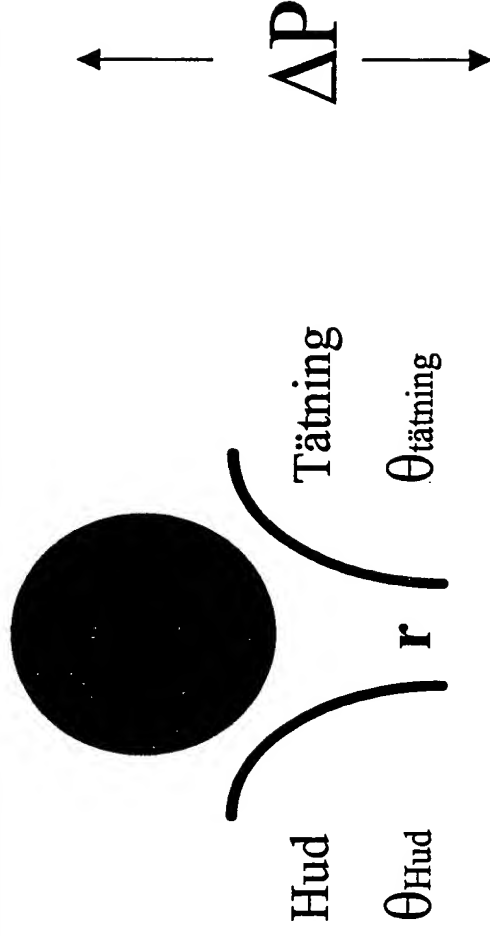
$$\Delta P = 2\gamma \cos \theta / r$$

Sealing ability to
withstand pressure
from urine

Patent, sealing



◆ Theory



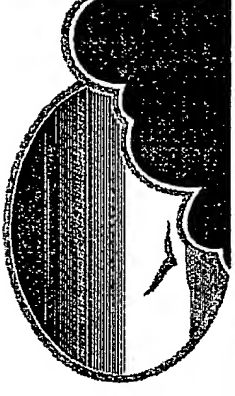
$$\Delta P = 2\gamma \cos \theta / r$$

Estimation of θ

$$\cos \theta = (x \cos \theta_{\text{Hud}} + y \cos \theta_{\text{Tätning}}) / (x + y)$$

x and y depends of the shape of the pore

Patent, sealing



◆ Example

- Huggies standing gather at 30% available stretch

$$\theta_{\text{hud}} = 74^\circ \text{ (plexiglas)}$$

$$\theta_{\text{tätning}} = 120^\circ \text{ (NW)}$$

$$\gamma = 0,06 \text{ N/m (SUM)}$$

$$r = 0,13 \text{ mm}$$

$$\cos\theta = (\cos\theta_{\text{hud}} + 3\cos\theta_{\text{tätning}})/4$$

$$\Delta P = 2\gamma\cos\theta/r = 28 \text{ mmvp}$$

(Measured value = 30 mmvp)